

**Texas Water Development Board (TWDB)  
Groundwater Database (GWDB)  
Well Information Report for State Well Number  
57-61-227**

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**Well Basic Details**

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State Well Number	5761227
County	Blanco
River Basin	Guadalupe
Groundwater Management Area	9
Regional Water Planning Area	K - Lower Colorado
Groundwater Conservation District	Blanco-Pedernales GCD
Latitude (decimal degrees)	30.094167
Latitude (degrees minutes seconds)	30° 05' 39" N
Longitude (decimal degrees)	-98.434167
Longitude (degrees minutes seconds)	098° 26' 03" W
Coordinate Source	Global Positioning System - GPS
Aquifer Code	218HSCC - Hensell Sand and Cow Creek Limestone
Aquifer	Trinity
Aquifer Pick Method	
Land Surface Elevation (feet above sea level)	1307
Land Surface Elevation Method	Digital Elevation Model -DEM
Well Depth (feet below land surface)	
Well Depth Source	
Drilling Start Date	
Drilling End Date	
Drilling Method	
Borehole Completion	

Well Type	Spring
Well Use	Irrigation
Water Level Observation	None
Water Quality Available	Yes
Pump	
Pump Depth (feet below land surface)	
Power Type	
Annular Seal Method	
Surface Completion	
Owner	Klepac Greenhouse Klepac Spring
Driller	
Other Data Available	
Well Report Tracking Number	
Plugging Report Tracking Number	
U.S. Geological Survey Site Number	
Texas Commission on Environmental Quality Source Id	
Groundwater Conservation District Well Number	
Owner Well Number	
Other Well Number	
Previous State Well Number	
Reporting Agency	Groundwater Conservation District
Created Date	10/23/2009
Last Update Date	11/3/2014

Remarks

**Casing - No Data**

**Well Tests - No Data**

**Lithology - No Data**

**Annular Seal Range - No Data**

**Borehole - No Data**

**Plugged Back - No Data**

**Filter Pack - No Data**

**Packers - No Data**

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**Water Level Measurements**

No Data Available

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### Water Quality Analysis

**Sample Date:** 7/29/2009    **Sample Time:** 1045    **Sample Number:** 1    **Collection Entity:** Blanco-Pedernales GCD

**Sampled Aquifer:** Hensell Sand and Cow Creek Limestone

**Analyzed Lab:** LCRA - Lower Colorado River Authority    **Reliability:** Sampled using TWDB protocols

**Collection Remarks:** Lab Calculated Anion/Cation Chg Bal set to TWDB Calculated Value due to an error in the lab calculated formula

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO3		286	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		276	mg/L	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4.1	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		2.68	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		32.7	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		336.81	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		131	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.11	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		137	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		9.55	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		1.2	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.25	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		472	mg/L	
01046	IRON, DISSOLVED (UG/L AS FE)	<	51	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		9.3	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		31.3	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		4.52	mg/L	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.02	mg/L	
00400	PH (STANDARD UNITS), FIELD		6.96	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)		0.037	mg/L	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		2.1	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4.1	ug/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00955	SILICA, DISSOLVED (MG/L AS SI02)		10.9	mg/L	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.17		
00932	SODIUM, CALCULATED, PERCENT		4	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		8.9	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		818	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		675	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		167	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		21.3	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		538	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		1.2	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.3	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)		4.9	ug/L	

### Water Quality Analysis

**Sample Date:** 7/27/2011    **Sample Time:** 0945    **Sample Number:** 1    **Collection Entity:** Blanco-Pedernales GCD

**Sampled Aquifer:** Hensell Sand and Cow Creek Limestone

**Analyzed Lab:** LCRA - Lower Colorado River Authority    **Reliability:** Sampled using TWDB protocols

**Collection Remarks:** Lab Calculated Anion/Cation Chg Bal set to TWDB Calculated Value due to an error in the lab calculated formula

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO3		278	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	2	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		266	mg/L	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		0.11	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		31.9	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		324.61	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		315	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.09	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		159	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		11	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		2.9	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.26	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		609	mg/L	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		22.9	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		51.2	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		1.1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		7.04	mg/L	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.59	mg/L	
00400	PH (STANDARD UNITS), FIELD		7.05	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		4.41	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SiO2)		10.9	mg/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.22		
00932	SODIUM, CALCULATED, PERCENT		4	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		12.8	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		1083	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		1280	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		339	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		20.8	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		757	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		1.2	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.7	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	4	ug/L	

### Water Quality Analysis

**Sample Date:** 6/26/2012    **Sample Time:** 1440    **Sample Number:** 1    **Collection Entity:** Blanco-Pedernales GCD

**Sampled Aquifer:** Hensell Sand and Cow Creek Limestone

**Analyzed Lab:** LCRA - Lower Colorado River Authority    **Reliability:** Sampled using TWDB protocols

**Collection Remarks:** Lab Calculated Anion/Cation Chg Bal set to TWDB Calculated Value due to an error in the lab calculated formula

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO3		280	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	2	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		270	mg/L	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		1.63	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		30.5	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		329.49	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)	<	50	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.07	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		101	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		9.63	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		6.9	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.24	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		323	mg/L	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		3.7	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		17	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		10.67	mg/L	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		2.41	mg/L	
00400	PH (STANDARD UNITS), FIELD		7.4	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		1.37	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SiO2)		10.6	mg/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.14		
00932	SODIUM, CALCULATED, PERCENT		4	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		5.79	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		579	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		342	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		31.7	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		20.6	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		350	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		2.7	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	4	ug/L	



### Water Quality Analysis

**Sample Date:** 6/12/2013    **Sample Time:** 1315    **Sample Number:** 1    **Collection Entity:** Blanco-Pedernales GCD

**Sampled Aquifer:** Hensell Sand and Cow Creek Limestone

**Analyzed Lab:** LCRA - Lower Colorado River Authority

**Reliability:** Sampled using TWDB protocols

**Collection Remarks:** No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO <sub>3</sub>		235	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	10	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO <sub>3</sub> )		261	mg/L	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		29.4	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO <sub>3</sub> )		318.51	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		69.6	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0722	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		97.8	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO <sub>3</sub> )		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		11.1	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.25	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO <sub>3</sub> )		303	mg/L	
01046	IRON, DISSOLVED (UG/L AS FE)	<	51	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		4	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		14.3	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO <sub>3</sub> )		1.7	mg/L	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.7	mg/L	
00400	PH (STANDARD UNITS), FIELD		7.03	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		1.26	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SiO <sub>2</sub> )		10	mg/L	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.14		
00932	SODIUM, CALCULATED, PERCENT		4	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		5.74	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		574	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		280	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		34.7	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		20.7	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		334	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.09	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	4	ug/L	

### Water Quality Analysis

**Sample Date:** 7/8/2014    **Sample Time:** 1120    **Sample Number:** 1    **Collection Entity:** Blanco-Pedernales GCD

**Sampled Aquifer:** Hensell Sand and Cow Creek Limestone

**Analyzed Lab:** LCRA - Lower Colorado River Authority    **Reliability:** Sampled using TWDB protocols

**Collection Remarks:** Lab Calculated Anion/Cation Chg Bal set to TWDB Calculated Value due to an error in the lab calculated formula

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO3		286	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	20	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		274	mg/L	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		-3	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		25.8	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		334.37	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)	<	50	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0686	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		89.3	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		8.9	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		2.67	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.25	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		291	mg/L	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		3.06	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		16.5	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		8.59	mg/L	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.94	mg/L	
00400	PH (STANDARD UNITS), FIELD		7.54	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		1.28	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SiO2)		11	mg/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
01075	SILVER, DISSOLVED (UG/L AS AG)	<	2	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.14		
00932	SODIUM, CALCULATED, PERCENT		4	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		5.51	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		584	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		370	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		28.3	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		20.6	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		334	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.83	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	4	ug/L	

### Water Quality Analysis

**Sample Date:** 7/28/2015    **Sample Time:** 1030    **Sample Number:** 1    **Collection Entity:** Blanco-Pedernales GCD

**Sampled Aquifer:** Hensell Sand and Cow Creek Limestone

**Analyzed Lab:** LCRA - Lower Colorado River Authority    **Reliability:** Sampled using TWDB protocols

**Collection Remarks:** Lab Calculated Anion/Cation Chg Bal set to TWDB Calculated Value due to an error in the lab calculated formula

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO3		290	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	20	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO3)		289	mg/L	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		1.3	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		33.5	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO3)		352.67	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		50.1	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0704	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		105	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO3)		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		10.1	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		1.73	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.11	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.2	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO3)		328	mg/L	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		3.55	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		15.9	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO3)		10.23	mg/L	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		2.31	mg/L	
00400	PH (STANDARD UNITS), FIELD		6.65	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		1.29	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SiO2)		11.3	mg/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.14		
00932	SODIUM, CALCULATED, PERCENT		4	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		6.03	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		649	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		300	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		20.8	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		20.7	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		355	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.41	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	4	ug/L	

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### Water Quality Analysis

**Sample Date:** 7/8/2016    **Sample Time:** 1100    **Sample Number:** 1    **Collection Entity:** Blanco-Pedernales GCD

**Sampled Aquifer:** Hensell Sand and Cow Creek Limestone

**Analyzed Lab:** LCRA - Lower Colorado River Authority    **Reliability:** Sampled using TWDB protocols

**Collection Remarks:** Lab Calculated Anion/Cation Chg Bal set to TWDB Calculated Value due to an error in the lab calculated formula

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO <sub>3</sub>		303	mg/L	
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		295	mg/L	
00430	ALKALINITY, CARBONATE DISSOLVED (MG/L), LAB	<	20	mg/L	
00420	ALKALINITY, HYDROXIDE DISSOLVED (MG/L), LAB	<	20	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)	<	20	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO <sub>3</sub> )		295	mg/L	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	4	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		3.2277	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	2	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		30.2	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO <sub>3</sub> )		360.002	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)	<	50	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0767	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		113	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO <sub>3</sub> )		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		10.4	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.206	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO <sub>3</sub> )		345.566	mg/L	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		3.24	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		15.3	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO <sub>3</sub> )		11.377	mg/L	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		2.57	mg/L	
00400	PH (STANDARD UNITS), FIELD		6.84	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)		0.0658	mg/L	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		1.2	mg/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	4	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		11.5	mg/L	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.147		
00932	SODIUM, CALCULATED, PERCENT		3.798	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		6.26	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		613.6	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		293	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		17.7	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		20.7	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		364.249	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.05	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	4	ug/L	



### Water Quality Analysis

**Sample Date:** 7/21/2017    **Sample Time:** 1130    **Sample Number:** 1    **Collection Entity:** Blanco-Pedernales GCD

**Sampled Aquifer:** Hensell Sand and Cow Creek Limestone

**Analyzed Lab:** LCRA - Lower Colorado River Authority    **Reliability:** Sampled using TWDB protocols

**Collection Remarks:** Lab Calculated Anion/Cation Chg Bal set to TWDB Calculated Value due to an error in the lab calculated formula

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		283	mg/L	
00430	ALKALINITY, CARBONATE DISSOLVED (MG/L), LAB		0	mg/L	
00420	ALKALINITY, HYDROXIDE DISSOLVED (MG/L), LAB		0	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO <sub>3</sub> )		283	mg/L	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		3.0749	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	1	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		27.7	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO <sub>3</sub> )		345.358	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)	<	50	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.055	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		94.9	mg/L	
82172	CARBON-14 FRACTION MODERN		0.8259		0.003
00445	CARBONATE ION, CALCULATED (MG/L AS CO <sub>3</sub> )		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		6.12	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)	<	1	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.208	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO <sub>3</sub> )		320.706	mg/L	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		3.89	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		20.2	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		1.17	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO <sub>3</sub> )		4.825	mg/L	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.09	mg/L	
00400	PH (STANDARD UNITS), FIELD		7.97	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)		0.0254	mg/L	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		1.21	mg/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	5	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		10.9	mg/L	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.132		
00932	SODIUM, CALCULATED, PERCENT		3.548	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		5.41	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		861	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		436	ug/L	
48297	STRONTIUM, ISOTOPE OF MASS 86 AND 87 RATIO		0.707726	N/A	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		17	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		20.9	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		331.022	mg/L	
07012	TRITIUM IN WATER (TRITIUM UNITS)		1.44	TU	0.09
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		1.02	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)	<	1	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

### Water Quality Analysis

**Sample Date:** 8/6/2018    **Sample Time:** 1450    **Sample Number:** 1    **Collection Entity:** Blanco-Pedernales GCD

**Sampled Aquifer:** Hensell Sand and Cow Creek Limestone

**Analyzed Lab:** LCRA - Lower Colorado River Authority    **Reliability:** Sampled using TWDB protocols

**Collection Remarks:** Lab Calculated Anion/Cation Chg Bal set to TWDB Calculated Value due to an error in the lab calculated formula

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO <sub>3</sub>		279	mg/L	
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		281	mg/L	
00430	ALKALINITY, CARBONATE DISSOLVED (MG/L), LAB		0	mg/L	
00420	ALKALINITY, HYDROXIDE DISSOLVED (MG/L), LAB		0	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO <sub>3</sub> )		281	mg/L	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		0.7136	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	1	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		30.8	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO <sub>3</sub> )		342.917	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)	<	50	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0692	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		103	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO <sub>3</sub> )		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		7.53	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		1.84	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		3.71	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.256	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO <sub>3</sub> )		331.399	mg/L	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		4.1	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		17.9	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)		1.03	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO <sub>3</sub> )		4.87	mg/L	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.1	mg/L	
00400	PH (STANDARD UNITS), FIELD		6.99	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		1.33	mg/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	5	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		11	mg/L	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.138		
00932	SODIUM, CALCULATED, PERCENT		3.645	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		5.75	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		616.4	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		380	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		42.4	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		21	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		363.028	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)		1.05	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.65	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

### Water Quality Analysis

**Sample Date:** 7/2/2020    **Sample Time:** 1250    **Sample Number:** 1    **Collection Entity:** Blanco-Pedernales GCD

**Sampled Aquifer:** Hensell Sand and Cow Creek Limestone

**Analyzed Lab:** LCRA - Lower Colorado River Authority

**Reliability:** Sampled using TWDB protocols

**Collection Remarks:** No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
39086	ALKALINITY FIELD DISSOLVED AS CaCO <sub>3</sub>		261	mg/L	
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		288	mg/L	
00430	ALKALINITY, CARBONATE DISSOLVED (MG/L), LAB		0	mg/L	
00420	ALKALINITY, HYDROXIDE DISSOLVED (MG/L), LAB		0	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO <sub>3</sub> )		288	mg/L	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)		12.3	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		2.31	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	1	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		31.5	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO <sub>3</sub> )		351.46	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		59.4	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.0722	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		108	mg/L	
28004	CARBON-14 DISS APPARENT AGE (YEARS BP)		1220	Y-BP	
82172	CARBON-14 FRACTION MODERN		0.8595		0.0031
00445	CARBONATE ION, CALCULATED (MG/L AS CO <sub>3</sub> )		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		15.9	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)		1.03	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		1.39	ug/L	
82081	DELTA CARBON 13 C13/C12 PER MIL		-8.9	0/00	
50791	DEUTERIUM, EXPRESSED AS PERMIL VSMOW		-24.16	0/00	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.236	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO <sub>3</sub> )		345.085	mg/L	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)	<	1	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		4.15	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		18.2	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO <sub>3</sub> )		6.685	mg/L	

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.51	mg/L	
50790	OXYGEN-18, EXPRESSED AS PERMIL VSMOW		-4.34	0/00	
00400	PH (STANDARD UNITS), FIELD		6.99	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		1.4	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	5	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		10.7	mg/L	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.203		
00932	SODIUM, CALCULATED, PERCENT		5.181	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		8.65	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		633.2	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		348	ug/L	
48297	STRONTIUM, ISOTOPE OF MASS 86 AND 87 RATIO		0.7078988	N/A	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		31.2	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		20.9	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		374.131	mg/L	
07012	TRITIUM IN WATER (TRITIUM UNITS)		1.63	TU	0.09
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.47	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

### Water Quality Analysis

**Sample Date:** 8/2/2021    **Sample Time:** 1645    **Sample Number:** 1    **Collection Entity:** Blanco-Pedernales GCD

**Sampled Aquifer:** Hensell Sand and Cow Creek Limestone

**Analyzed Lab:** LCRA - Lower Colorado River Authority

**Reliability:** Sampled using TWDB protocols

**Collection Remarks:** No Data

Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
00425	ALKALINITY, BICARBONATE DISSOLVED (MG/L), LAB		287	mg/L	
00430	ALKALINITY, CARBONATE DISSOLVED (MG/L), LAB		0	mg/L	
00420	ALKALINITY, HYDROXIDE DISSOLVED (MG/L), LAB		0	mg/L	
00415	ALKALINITY, PHENOLPHTHALEIN (MG/L)		0	mg/L	
00410	ALKALINITY, TOTAL (MG/L AS CaCO <sub>3</sub> )		287	mg/L	
01106	ALUMINUM, DISSOLVED (UG/L AS AL)	<	5	ug/L	
50938	ANION/CATION CHG BAL, PERCENT		1.33	PCT	
01095	ANTIMONY, DISSOLVED (UG/L AS SB)	<	1	ug/L	
01000	ARSENIC, DISSOLVED (UG/L AS AS)	<	1	ug/L	
01005	BARIUM, DISSOLVED (UG/L AS BA)		32.9	ug/L	
01010	BERYLLIUM, DISSOLVED (UG/L AS BE)	<	1	ug/L	
00440	BICARBONATE ION, CALCULATED (MG/L AS HCO <sub>3</sub> )		350.239	mg/L	
01020	BORON, DISSOLVED (UG/L AS B)		55.2	ug/L	
71870	BROMIDE, DISSOLVED, (MG/L AS BR)		0.071	mg/L	
01025	CADMIUM, DISSOLVED (UG/L AS CD)	<	1	ug/L	
00915	CALCIUM, DISSOLVED (MG/L AS CA)		104	mg/L	
00445	CARBONATE ION, CALCULATED (MG/L AS CO <sub>3</sub> )		0	mg/L	
00941	CHLORIDE, DISSOLVED (MG/L AS CL)		11.3	mg/L	
01030	CHROMIUM, DISSOLVED (UG/L AS CR)	<	1	ug/L	
01035	COBALT, DISSOLVED (UG/L AS CO)	<	1	ug/L	
01040	COPPER, DISSOLVED (UG/L AS CU)		5.58	ug/L	
00950	FLUORIDE, DISSOLVED (MG/L AS F)		0.223	mg/L	
00900	HARDNESS, TOTAL, CALCULATED (MG/L AS CaCO <sub>3</sub> )		328.891	mg/L	
01046	IRON, DISSOLVED (UG/L AS FE)	<	50	ug/L	
01049	LEAD, DISSOLVED (UG/L AS PB)		1.23	ug/L	
01130	LITHIUM, DISSOLVED (UG/L AS LI)		3.55	ug/L	
00925	MAGNESIUM, DISSOLVED (MG/L AS MG)		16.7	mg/L	
01056	MANGANESE, DISSOLVED (UG/L AS MN)	<	1	ug/L	
71890	MERCURY, DISSOLVED (UG/L AS HG)	<	0.2	ug/L	
01060	MOLYBDENUM, DISSOLVED (UG/L AS MO)	<	1	ug/L	
71851	NITRATE NITROGEN, DISSOLVED, CALCULATED (MG/L AS NO <sub>3</sub> )		6.286	mg/L	
00631	NITRITE PLUS NITRATE, DISSOLVED (MG/L AS N)		1.42	mg/L	
00400	PH (STANDARD UNITS), FIELD		7.01	SU	
00666	PHOSPHORUS, DISSOLVED (MG/L AS P)	<	0.02	mg/L	
00935	POTASSIUM, DISSOLVED (MG/L AS K)		1.14	mg/L	
71860	RESIDUAL SODIUM CARBONATE, CALCULATED		0		

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Parameter Code	Parameter Description	Flag	Value*	Units	Plus/Minus
01145	SELENIUM, DISSOLVED (UG/L AS SE)	<	5	ug/L	
00955	SILICA, DISSOLVED (MG/L AS SI02)		10.9	mg/L	
01075	SILVER, DISSOLVED (UG/L AS AG)	<	1	ug/L	
00931	SODIUM ADSORPTION RATIO, CALCULATED (SAR)		0.147		
00932	SODIUM, CALCULATED, PERCENT		3.892	PCT	
00930	SODIUM, DISSOLVED (MG/L AS NA)		6.11	mg/L	
00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM AT 25C)		625	MICR	
01080	STRONTIUM, DISSOLVED (UG/L AS SR)		325	ug/L	
00946	SULFATE, DISSOLVED (MG/L AS SO4)		24.1	mg/L	
00010	TEMPERATURE, WATER (CELSIUS)		21.7	C	
01057	THALLIUM, DISSOLVED (UG/L AS TL)	<	1	ug/L	
70301	TOTAL DISSOLVED SOLIDS , SUM OF CONSTITUENTS (MG/L)		353.297	mg/L	
22703	URANIUM, NATURAL, DISSOLVED (UG/L AS U)	<	1	ug/L	
01085	VANADIUM, DISSOLVED (UG/L AS V)		1.28	ug/L	
01090	ZINC, DISSOLVED (UG/L AS ZN)	<	5	ug/L	

\* Value may not display all significant digits for parameter in results, check Scanned Documents for laboratory paperwork..

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